

# **CLAIMS**

1. An ancillary unit drive adapter for use in an engine  
5 block which has at one end a lateral flange formed with  
an aperture for mounting of the ancillary unit, the drive  
adapter comprising a casing for mounting on the end face  
of the engine to overlies the aperture, a shaft journalled  
10 in the casing, a formation at one end of the shaft to  
enable the shaft to be coupled to the input shaft of the  
ancillary unit and a cog solid with the opposite end of  
the shaft for meshing with an engine driven gear, and  
characterised in that faces on the opposite sides of the  
15 cog serve in use as bearing surfaces to withstand axial  
forces acting in both directions on the drive shaft.

2. A drive adapter according to claim 1, characterized  
in that the part of the drive shaft engaged by the cog  
20 has the same diameter as the part journalled in the  
casing.

3. A drive adapter according to claim 2, characterized  
25 in that the drive shaft is formed as a hollow shaft.

4. A drive adapter according to claim 3, characterized  
in that an internally splined coupling is formed by  
30 broaching one end of the shaft.

5. A drive adapter according to claim 4, characterized  
in that a drainage hole is provided to permit oil  
35 collecting in the hollow shaft to drain away in use into  
the housing of the engine flywheel.

6. A drive adapter according to claim 5, characterized  
in that the drive shaft is eccentrically mounted within  
5 the casing.

7. An engine fitted with an adapter according to  
preceding claim 1, further comprising a cover encasing  
10 the end face of the engine, which cover is formed with a  
raised ridge for contacting the bearing surface on the  
cog to limit axial displacement of the drive shaft.

15 8. An engine according to claim 7, characterized in  
that the ridge is crescent shaped and has an upward  
facing opening so as to act as a collector for oil  
draining down the cover, the collected oil serving to  
lubricate the bearing surfaces between the cog and the  
20 ridge.